

REMARKS

Claims 1-21 were examined in the non-final office action dated April 20, 2004. The applicant appreciates the allowance of claim 21 and the indication that claims 9, 10, 19 and 20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4 and 5 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite. Claims 1-6 and 11-14 stand rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Rando, U.S. Patent No. 5,287,627 ("Rando"). Claims 1 and 2 stand further rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Gardiner, et al., PCT Publication No. WO01/91978 A2 ("Gardiner"). Claims 7, 8, and 15-18 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious over Rando. Allowance of all claims is respectfully requested for the reasons set forth herein.

Claims 4 and 5 are Not Indefinite.

Claims 4 and 5 stand rejected as being indefinite because there is no antecedent basis for "the sonic range finder." Claim 4 has been amended to replace that term with "the waveform range finder," which has antecedent basis in claim 1. Accordingly, this rejection should be withdrawn.

Claims 1 and 12 are Not Anticipated or Obvious

Claim 1 recites, in part, a housing, a retractable tape disposed within the housing, a first end of the retractable tape extendible out of the housing in a first direction, and a waveform range finder configured to emit a waveform substantially in the first direction to measure an internal dimension from a target to the housing. Support for the amended portion of the claim can be found in Fig. 1. Claim 12 recites, in part, engaging a waveform range finder within a housing and extending a retractable tape from within the housing across an item that corresponds to the targeted location to measure the external dimension of the item. Claims 1 and 12 are allowable over the cited and applied references.

Claims 1 and 12 are Allowable Over Rando

The office action asserts that Rando discloses in Fig. 13C a housing with a retractable tape and a laser pointer. The office action further asserts that Rando teaches in column 12, line 58 - column 13, line 4 that an acoustic measuring device may be made integral with the laser pointer. Applicant respectfully traverses this assertion.

Rando discloses an automatic plumb and level tool with measuring capability. Fig. 13C depicts an embodiment of a tape measure 102 with a laser pointer 12h that "can be used as a reference marking beam for accurate measurement along a horizontal line using the tape 104." Column 11, lines 66-68. This embodiment only teaches a housing with a retractable tape.

Column 12, line 58 - column 13, line 4 describe Fig. 16, which depicts another embodiment distinct from the embodiment of Fig. 13C. This embodiment teaches the use of a laser tool that projects plumb beams in both the up and down direction. See C 12, L33-57. The specification then further describes the embodiment of Fig. 16. "[The laser tool] can be integral with or attached to an *acoustic distance measuring device*... the device can be aimed at a special acoustic reflector... Without such a pointing beam, acoustic distance measuring devices have tended to read the distance to a wood wall differently from the distance to a dry wall, for example." C12, L58 - C13, L4. Neither Fig. 16 nor the specification teach that this embodiment can include a retractable tape measure in addition to the acoustic distance measuring device. It teaches a housing with *only* an acoustic measuring device.

Rando teaches several embodiments that have *either* an acoustic measuring device *or* a tape measure, but Rando does not teach a housing that includes *both* a retractable tape measure and an acoustic measuring device anywhere within the specification.

Accordingly, the rejection based on anticipation must be withdrawn.

Further, claims 1 and 12 are nonobvious over Rando. There is no motivation within Rando for a housing that includes both a waveform range finder and a retractable tape measure. As found by the Federal Circuit, when an inventor shows an insight contrary to the understanding of and the expectations of the art, making previously separate components integral creates patentable subject matter. See MPEP 2144.04 V.B. (citing *Schenck v. Nortron Corp.*, 713 F.2d 782 (Fed. Cir. 1983)). Here, a retractable tape and a waveform range finder have been previously thought of as duplicative tools, because they both measure lengths. In fact, the waveform range finder has been thought of as a replacement for or an

improvement on the tape measure, not a complementary piece of equipment. Thus, it is counterintuitive to include the two measuring devices in a single housing. This is underscored by Rando's disclosing several embodiments, and not a single one including both elements.

Insight has been shown in the recognition that by combining these two items into a single housing, great amounts of time can be saved and frustration can be avoided. In the construction industry, a user is often required to measure an internal length such as the distance from a particular point to a wall (or target), and then measure an external length on a piece of lumber to mark off and cut the lumber to fit the internal length. A waveform range finder can be used to measure the internal length quickly and accurately. The user must then use a separate tool, a retractable tape, to measure and mark off the necessary external length on the lumber. Thus, a user must carry two separate measuring devices (for example the retractable tape of Fig. 13C and the acoustic measuring device of Fig. 16) to most efficiently perform the different types of measurements.

The claimed device overcomes this inefficiency by incorporating two separate measuring devices into a single housing. The user can measure both an internal length and an external length of a piece of lumber with a single device. The user is not required to carry two separate devices, and is further relieved from having to put the first away and locate and retrieve the second. Because Rando does not recognize this inefficiency, and is further not even directed to overcoming this inefficiency, Rando cannot suggest the combination of claim 1 or claim 12. Accordingly, claims 1 and 12 are allowable over Rando.

Finally, Rando does not teach all of the elements of claims 1 or 12. "To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143.03. Rando does not teach a retractable tape and a range finder in a single housing, and further does not teach that the retractable tape extends in a first direction, and the waveform range finder is configured to emit a waveform in the first direction. Accordingly, Rando does not teach all the elements of claims 1 and 12, and these claims are allowable over Rando.

Claim 1 is Allowable Over Gardiner

Claim 1 stands further rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Gardiner. Gardiner discloses a tool including a housing 12 having a multi-functional module 14 disposed within a substantially cylindrical module receiving cavity 21

in the housing 12. The multi-functional module 14 is adapted to contain a mechanical and/or electronic device. The disclosure includes a long laundry list of possible options for the module 14, "singly or in combination." As correctly pointed in the office action, two items in this list of eighteen possible modules are a tape measure and a laser measurement/range finder.

Gardiner discloses an embodiment of the module 14 with a laser range finder "singly," but does not disclose any embodiment of a tape measure, singly or in combination with the laser range finder. There is no disclosure of how the tape measure would be mounted to or operated relative to the range finder. Thus, there is no teaching that both extend substantially in a first direction as claimed. Accordingly, the rejection for anticipation is overcome.

Further, there is no suggestion within Gardiner of a waveform range finder and a retractable tape that both extend in a first direction. While Gardiner does disclose eighteen items, there is no suggestion that these two specific items be combined. It is conceded that it would be suggested to combine the golf scoring card and the laser range finder, because these two items have known utility together, i.e., scoring a round of golf, and using the range finder to determine the distance from the lay to the pin. Likewise, the compass and the electronic map have known utility together.

However, there is no suggestion within Gardiner to combine a waveform range finder and the retractable tape because such a combination is contrary to the understandings of the art. Again, it would be counterintuitive to combine a tape measure and a laser range finder because the expectations in the art are that these are generally duplicative tools. It has been found, however, that these tools can have a complementary use in measuring distances with the range finder, then marking lumber to be cut with the retractable tape. Insight has thereby been shown which is contrary to the expectations of the art. Thus, there is no suggestion within Gardiner to combine these two elements, despite the long list of possible modules.

Claims 9, 10, 19 and 20 are Allowable

The office action indicated that claims 9, 10, 19, and 20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 has been amended into independent form to include the subject matter of claims 1 and 3, and claim 19 has been amended into independent form to include the subject matter of claims 12 and 14. Claim 10 depends from claim 9 and claim 20 depends from claim 19. Accordingly, these claims are in allowable format.

Claim 5 is Allowable

Claim 5 recites, in part, that the housing has a back side and a front side and a switch on the back side, wherein the internal dimension measured is from the target to the front side, wherein the distance from the back side to the front side defines a predetermined distance, wherein the window is adapted to display the dimension measured plus the predetermined distance when the switch is engaged during measuring.

The office action asserts that claim 5 is anticipated by Rando, stating simply, "with respect to claim 5, see switch 156." Switch 156 is an "on/off switch" and there is no teaching in Rando that the window displays the measurement from the target to the front side of the housing plus the distance from the front side to the back side of the housing when the switch is engaged. Further, because there is no teaching of this aspect, claim 5 is nonobvious over Rando. Accordingly, claim 5 is allowable over Rando.

CONCLUSION

In view of the foregoing remarks, it is submitted that the claims as now appearing in this application are in good and proper form for allowance. A favorable action on the part of the examiner is respectfully solicited. If, in the opinion of the examiner, a telephone conference would expedite prosecution of the subject application, the examiner is invited to call the undersigned attorney.

Dated: July 20, 2004

Respectfully submitted,

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